Today's consumers want more convenience and performance features in their refrigerators. They want attractive looking refrigerators, flexible food storage options and a choice of refrigerator configuration (side-by-side, top freezer, bottom freezer or counter depth). Due to rising energy costs, consumers are also looking to purchase energy-efficient refrigerators that will help them reduce their monthly electricity bill.

The preferred temperature is somewhere **between 35 and 38 degrees F** (1.7 to 3.3 degrees C). Anything higher and foods will spoil too quickly (it also presents food poisoning problems, as described in several of the links below). Anything lower and freezing becomes a problem.

Frost-free refrigerators have two fans. One is under the refrigerator to **cool the compressor** and **force air through the exterior coils**. The second is inside and **moves air around the coils inside the refrigerator**. This second fan helps provide more **even cooling**, and also **aids in the defrost process**.

Since black is a good heat-absorbing color, it is also a good heat-radiating color. One of the things the external coils do is **radiate heat**, so backs of refrigerators are painted black to help that process.

* automatic ice maker,
* through-the-door ice and/or water delivery,
* tempered glass shelves
* spill saver feature to contain spills
* gallon-sized door bins
* frost-free feature
* energy efficient

A **frost-free freezer** has three basic parts:

* A **timer**
* A **heating coil**
* A **temperature sensor**

Every six hours or so, the **timer** turns on the heating coil. The **heating coil** is wrapped among the freezer coils. The heater melts the ice off the coils. When all of the ice is gone, the **temperature sensor** senses the temperature rising above 32 degrees F (0 degrees C) and turns off the heater.

Heating the coils every six hours takes energy, and it also cycles the food in the freezer through temperature changes. Most large chest freezers therefore require manual defrosting instead -- the food lasts longer and the freezer uses less power.

(Source: http://www.ehow.com)